Annex to Form PCT/ISA/206 COMMUNICATION RELATING TO THE RESULTS OF THE PARTIAL INTERNATIONAL SEARCH

International Application No PCT/GB 01/00500

- 1. The present communication is an Annex to the invitation to pay additional fees (Form PCT/ISA/206). It shows the results of the international search established on the parts of the international application which relate to the invention first mentioned in claims Nos.:
- 1-19 133-151, 65-78, 193-211, 225-233 2. This communication is not the international search report which will be established according to Article 18 and Rule 43.
- 3. If the applicant does not pay any additional search fees, the information appearing in this communication will be considered as the result of the international search and will be included as such in the international search report.
- 4.If the applicant pays additional fees, the international search report will contain both the information appearing in this communication and the results of the international search on other parts of the international application for which such fees will have been paid.

	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	US 5 184 135 A (PARADISE RONALD Y) 2 February 1993 (1993-02-02)	1,65, 133,193, 225
A	abstract column 2, line 6 -column 4, line 50; figures 1,2	8-10, 13-15, 17,78, 140-146
A	US 4 244 026 A (DICKEY JR FRANK R) 6 January 1981 (1981-01-06)	1,8,13, 17,65, 133,193, 225
	column 4, line 49 -column 20, line 23; figures 1-17	
A	US 5 181 039 A (OSWALD GORDON K A ET AL) 19 January 1993 (1993-01-19)	1,8,65, 133,193, 225
	abstract column 3, line 12 -column 7, line 38; figures 1-16	
	DE 196 37 843 A (DAIMLER BENZ AEROSPACE AG) 19 March 1998 (1998-03-19) abstract	1,133
	page 1, line 55 -page 6, line 10; figures 1,2	
1	-/	

X Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

- * Special categories of cited documents :
- "A" document defining the general state of theart which is not considered to be of particular relevance
- "E" earlier document but published on or after theinternational filing date
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- O* document referring to an oral disclosure, use, exhibition or other means
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- "&" document member of the same patent family

Annex to Form PCT/ISA/206 COMMUNICATION RELATING TO THE RESULTS OF THE PARTIAL INTERNATIONAL SEARCH

International Application No
PCT/GB 01/00500

		<u></u>
C.(Continua	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
А	US 5 829 782 A (JOHNSON WENDELL C ET AL) 3 November 1998 (1998-11-03) cited in the application	
Α	WO 98 00729 A (CAMBRIDGE CONSULTANTS;CLOUSTON ERIC NICOL (GB); KERRY NICHOLAS JO) 8 January 1998 (1998-01-08) cited in the application	
A	WO 97 14058 A (CAMBRIDGE CONSULTANTS; KERRY NICHOLAS JOHN (GB); UTSI PER ARNE VIN) 17 April 1997 (1997-04-17) cited in the application	
A	WO 98 00728 A (FORD MOTOR CO ;FORD WERKE AG (DE); FORD FRANCE (FR); FORD MOTOR CO) 8 January 1998 (1998-01-08)	
Α	BENLARBI-DELAI A ET AL: "Microwave short-range interferometric radar" 1998 INTERNATIONAL CONFERENCE ON MODELING AND SIMULATION OF MICROSYSTEMS, SEMICONDUCTORS, SENSORS AND ACTUATORS, PROCEEDINGS OF MODELLING AND SIMULATION OF MICROSYSTEMS, SEMICONDUCTORS, SENSORS AND ACTUATORS, SANTA CLARA, CA, USA, 6-8 APRIL 1998, pages 637-642, XP001006127 1998, Cambridge, MA, USA, Computational Publications, USA ISBN: 0-9666135-0-3 abstract page 637, left-hand column, paragraph INTRODUCTION -page 642, left-hand column, line CONCLUSION; figures 1-7	1,8-13, 65,133, 140-146, 193,225

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Patent Family Annex

Information on patent family members

International Application No
PCT/GB 01/00500

Patent documen cited in search rep	t ort	Publication date		Patent family member(s)	Publication date
US 5184135	Α	02-02-1993	NONE		•
US 4244026	Α	06-01-1981	DE EP JP JP JP NO	2966533 D 0010974 A 1020395 B 1536586 C 55082067 A 793553 A,B,	16-02-1984 14-05-1980 17-04-1989 21-12-1989 20-06-1980 07-05-1980
US 5181039	Α -	19-01-1993	DE DE EP ES WO JP JP	69023134 D 69023134 T 0469027 A 2078342 T 9013048 A 2681309 B 4505659 T	23-11-1995 20-06-1996 05-02-1992 16-12-1995 01-11-1990 26-11-1997 01-10-1992
DE 19637843	Α	19-03-1998	NONE		
US 5829782	A	03-11-1998	US US GB US US US US US US US US US US US US US	6039139 A 6116639 A 5901978 A 2289332 A,B 2324864 A,B 6141432 A 5629681 A 5835613 A 5822707 A 5748473 A 5845000 A 4492128 T 9501120 T 9422693 A 6168198 B 5653462 A 5848802 A 6186537 B	21-03-2000 12-09-2000 11-05-1999 15-11-1995 04-11-1998 31-10-2000 13-05-1997 10-11-1998 05-05-1998 01-12-1998 27-06-1996 04-02-1997 13-10-1994 02-01-2001 05-08-1997 15-12-1998 13-02-2001
WO 9800729	A	08-01-1998	EP WO US	0906581 A 9800728 A 6215438 B	07-04-1999 08-01-1998 10-04-2001
WO 9714058	A	17-04-1997	AU DE EP EP US	7221796 A 69611927 D 1070968 A 0853768 A 6218983 B	30-04-1997 05-04-2001 24-01-2001 22-07-1998 17-04-2001
WO 9800728	A	08-01-1998	EP WO US	0906581 A 9800729 A 6215438 B	07-04-1999 08-01-1998 10-04-2001







Application No:

GB 0002857.1

Claims searched: 1-7 and 131

Examiner:

Robert Shorthouse

Date of search:

7 April 2000

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.R): H4D (DRPF, DRPZ, DFC, DPAB, DPAC, DLFX, DLPX) G1G (GRC)

Int Cl (Ed.7): G01S 13/00, /44, /50, 17/42, /46

Other: Online: WPI, EPODOC, JAPIO, INSPEC, DIALOG

Documents considered to be relevant:

Category	Identity of docume	ent and relevant passage		Relevant to claims
Α	GB 2308034 A	(SECRETARY OF STATE) See abstract		1, 131
A	GB 2075301 A	(PHILIPS CORP) See abstract	/	1, 131
A	US 517/4135	(PARADISE) See abstract	5	1,131

AMENDED AFTER 7/C WITH EXAMINER Per claim =

X Document indicating lack of novelty or inventive step
 Y Document indicating lack of inventive step if combined with one or more other documents of same category.

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A Document indicating technological background and/or state of the art.
 P Document published on or after the declared priority date but before the filing date of this invention.

E Patent document published on or after, but with priority date earlier than, the filing date of this application.







Application No: Claims searched:

GB 0002857.1 17-39, 148-181

Examiner:
8-181 Date of search:

Simon Berry 17 January 2001

120-64)

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.S): GIG (GRA); H4D (DLAB, DLRC, DLPD, DLRE, DLRG, DRPA,

DRPB, DRPC, DRPD)

Int Cl (Ed.7): G01S 13/93, 15/93, 17/93

Other: ONLINE DATABASES: EPODOC, WPI, JAPIO

PCT Claim 20

Documents considered to be relevant:

Category	Identity of docum	ent and relevant passage	Relevant to claims
x	GB 2328820 A	(MANDAIR) See whole document. Note triggering of alarm when 'safe distance' is breached.	17,148 at least
x	GB 2324864 A	(AUTOMOTIVE TECHNOLOGIES) Vehicle interior monitoring of presence/position of occupants. See whole document.	17,148 at least
x	GB 2315179 A	(FUJI) See whole document. Note establishment of 'safe inter-vehicle distance' and warning system.	17,148 at least
x	GB 2309555 A	(ROVER GROUP LTD.) See whole document. Note 'safety area' in abstract and associated control.	17,148 at least
X	EP 0188757 A1	(SIEMENS AG) See WPI abstract and Figure 1. Note input of 'monitoring zone' for protection by microwave antenna.	17,148 at least

X Document indicating lack of novelty or inventive step
Y Document indicating lack of inventive step If combined

A Document indicating technological background and/or state of the art.

P Document published on or after the declared priority date but before the filing date of this invention.

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with one or more other documents of same category.







Application No:

GB 0002857.1

Examiner: Date of search: Simon Berry 17 January 2001

Claims searched: 17-39, 148-181

Category	Identity of docume	ent and relevant passage	Relevant to claims
х	EP 0023625 A2	(DORNIER SYSTEM GMBH) See abstract and Figure 2. Note establishment of 'solid zone' A for triggering of alarm.	17,148 at least
х	US 4952939	(SEED) See whole document, including 'detection zone' and subsequent detection and processing.	17.148 at least
х	US 4595924	(GENERAL DYNAMICS) See whole document. Note 'surveillance zone' and detection arrangement.	17.148 at least
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X	Document indicating lack of novelty or inventive step
Y	Document indicating lack of inventive step if combined
	with one or more other documents of same caregory.

Document indicating technological background and/or state of the art. Document published on or after the declared priority dute but before the filing date of this invention.

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Patent document published on or after, but with priority date earlier than, the filing date of this application.







PET Claim

Application No: Claims searched: GB 0002857.1 77-88, 201-213 Examiner: Date of search: Simon Berry 17 January 2001

(44

Patents Act 1977 Search Report under Section 17

Databases searched:

Other:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.S): H4D (DD, DX, DMXX, DRPZ, DRPA)

Int Cl (Ed.7): G01S 7/41, 7/48

ONLINE DATABASES: EPODOC, WPI, JAPIO

Documents considered to be relevant:

Category Identity of document and relevant passage Relevant to claims X GB 2252217 A (TZN) 77,201 at See whole document, especially abstract and Figure least US 5392050 (GRUMMAN AEROSPACE CORP) A See whole document. Note use of comparison with stored data. X US 5386737 (GRUMMAN AEROSPACE CORP) 77,201 at least See whole document X WPI Abstract Accession No. 75-A3113W & DE 2329690 (PHILIPS), 77,201 at least See WPI abstract.

Document indicating lack of novelty or inventive step Document indicating lack of inventive step if combined

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Document published on or after the declared priority date but before the filing dute of this invention.

Patent document published on or after, but with priority date carlier than, the filing date of this application.







PCT Claim 110

Application No:

GB 0002857.1

Claims searched: 89-99

(110)

Examiner:

Simon Berry

17 January 2001 Date of search:

Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.S): H1Q (QBE, QBX); H4D (DRPB, DRPF, DRPN, DRPP, DRPO, DRPZ)

Int Cl (Ed.7): H01Q 21/00, 21/06; G01S 13/00

Other: ONLINE DATABASES: EPODOC, WPI, JAPIO

Documents considered to be relevant:

(109). Category Identity of document and relevant passage Relevant to claims X GB 2336261 A (VALENTINO) Tracking system antenna array operating in the 89 to 92 at least microwave band. See whole document, especially abstract and Figure 1. X GB 2328819 A (FORD) Note antennae clusters 43,45,47,49 with 89,90 at transmitters and plurality of receivers in Figures least and abstract. X GB 2038132 A (THOMAS AND DODS) See whole document. Note transmitter /receiver 89 аттау 8,10,12 mounted on vehicle bumper. X EP 0831553 A (HONDA) Antenna array for vehicle object avoidance. See 89 at least whole document, noting arrangement of transmit (12) and receive (14) elements.

X	Document indicating lack of novelty or inventive step
Y	Document indicating lack of inventive step if combined
	with one or more other documents of same category.

Member of the same patent family

Document indicating technological background and/or state of the art. Document published on or after the declared priority date but before the filing date of this invention.

Patent document published on or after, but with priority date earlier than, the filing date of this application.







Application No: Claims searched:

GB 0002857.1 53-57, 182-186

Examiner:
Date of search:

Simon Berry 18 January 2001

.19

Patents Act 1977
Further Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.S): H4D (DLPA, DLSX, DRPF, DRPU, DRPX)

Int Cl (Ed.7): G01S 7/00, 7/285, 7/486, 7/526, 13/00, 13/02, 13/18, 13/44, 15/42,

17/42

Other: ONLINE DATABASES: EPODOC, WPI, JAPIO

Documents considered to be relevant:

PCT Claim 65

Category	Identity of document and relevant passage		
x	GB 2307811 A	(BRITISH GAS PLC) Measuring device. See particularly page 7, line 15 to page 8, line 5. Note description of variable sampling.	53,182 at least
x	WO 96/07932 A1	(ZIRCON CORPORATION) Radar system with continuously varying range gate delay. See abstract.	53,182 at least
x	WO 96/07928 A1	(UNIVERSITY OF CALIFORNIA) See reference to 'receiver sweeps' in abstract.	53,182 at least

X Document indicating lack of novelty or inventive step
Y Document indicating lack of inventive step if combined

Document indicating lack of inventive step if combined with one or more other documents of same category.

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P Document published on or after the declared priority date but before the filing date of this invention.

E Patent document published on or after, but with priority date earlier than, the filing date of this application.







Application No: Claims searched:

GB 0002857.1

62-76, 187-200

Examiner:

Simon Berry

Date of search:

22 January 2001

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Patents Act 1977
Further Search Report under Section 17

Databases searched:

Other:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.S): GIG (GRA); H4D (DFC, DLAB, DLRC, DLRE, DLRG, DLPD, DRPA

DRPC, DRPD, DRPF, DRPZ)

Int Cl (Ed.7): G01S 13/00, 13/44

ONLINE DATABASES: EPODOC, WPI, JAPIO

Documents considered to be relevant:

Pet Claim 78 (mon dependent)

Category	Identity of documen	nt and relevant passage	Relevant to claims
x	WO 97/14058 A1	(CAMBRIDGE CONSULTANTS LTD.) See whole document. Note generation of 3-D position data for detected objects.	62,187 at least
х	WO 89/06808 A1	(PAOLETTI) See whole document. Note angular measurement using radar and windscreen display.	62, 187 at least
x		ar Handbook, 2nd edition, McGraw-Hill 1990. See ase-Comparison Monopulse'.	62,187 at least

X Document indicating lack of novelty or inventive step

Y Document indicating lack of inventive step if combined with one or more other documents of same category.

Member of the same patent family

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